

Residential Gly-Pack Feed Systems Operations & Maintenance Manual



Record Your Model, Serial Number and Other Information on the back of this document.

Manufacturing: Bypass & Filter Feeders, Glycol Feed Packages, Separators & Separator Systems, Tanks, Tank Stands, Chemical Batch Mixers, Corrosion Coupon Racks, Packaged Feed Systems and Custom Systems

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*** WARNING - BEFORE YOU GET STARTED ***

- 1) All fasteners & fittings should be inspected and secured before operation as they may be loosened in transit
- 2) Personnel safety practices should apply at all times
- 3) Safety glasses or face shields and gloves should be worn
- 4) Do not service glycol feed package without disconnecting power
- 5) Close isolation valve and release pressure before servicing any components on the system
- 6) All liquids in system should be drained before servicing
- **1.0 INTRODUCTION** Thank you for choosing General Treatment Products Residential "Gly-Pack" Glycol Feed Package. This automated package comes complete and ready to install. In this document we explain the basics for locating; installing, adjusting, operating and maintaining this glycol feed system. For further information, please visit www.qtpcompany.com or contact customer service.
- **2.0 WARRANTY** General Treatment Products Residential "Gly-Pack" Feed Systems are guaranteed for two years from date of shipment against manufacturing defects in material and workmanship that develop in the service for which they are designed. We will repair or replace a defective part of this system when returned to our factory with freight prepaid; providing that the part is found to be defective upon inspection. We assume no liability for labor and/or other expenses in making repairs or adjustments.
- **3.0 UNPACKING Upon receipt of order, inspect package thoroughly**. In the event there was damage incurred in transit you must notify the freight company within **3-5 days of receipt of order**. Once system is inspected for damage and received in good condition, and store indoors until installing.

3.1 ORDER VERIFICATION

MODEL								
GRE	07 -	E7	-4 /ALM					
				OPTIO	NS			
				-ALM	Audible Alarm & Silence	Switch		
				-MNT	Wall Mounting Bracket			
				PRESS	JRE RANGE			
					CUT-IN (Lo PSI)	CUT-OUT (Hi PSI)	PSID	
				4	6-20	N/A	5.4 - 16 *	
				5	20-60	N/A	18 - 48 *	
				E **	1.4	60	N/A	
				PUMP				
				_E7	0.80GPM AT 40PSI mini diaphragm pump			
					244 242			
					GALLONS)			
				07	7.5 gallon PE tank and hinged cover			
				_15	15 gallon PE tank and hinged cover			
					1005			
				BASE M				
				GRE	Glycol home/residential economy package, low level, pressure			
				DCDE	switch, pump, pressure gauge, mix valve and indicator lights.			
				DGRE	Digital Glycol home/residential economy package, low level, pressure switch, pump, pressure gauge, mix valve and indicator			
					lights.	pressure gauge, mix	vaive and indicator	
					ligitts.			

Note: Not all options and sizes available on all systems. See pricing for standard models.

- **4.0 LOCATION AND ENVIROMENT** Although some of the components are NEMA rated, the gear pump, pressure switch and power cord should not be exposed to direct elements. In all cases a shelter, awning or shed needs to be installed or glycol feed packages need to be installed indoors to validate warranty.
- **5.0 INSTALLATION** Once location is decided on, system need to be securely mounted to wall studs with mounting brackets (optional) or to firm level secure. **Be sure that mounting pads/wall studs and anchoring bolts comply with local building codes.** Glycol feed packages come standard with an 8FT power cord. Power supply with no less than 5 amps should be within 8FT of package. **Extension cords should not be used at any time.** Systems can be hardwired, if need. Have only an experienced electrician hardwire system. Wiring diagrams are provided in section 9.0. Security access door, provided, will deter tampering and or improper setting changes. Provided, bolt secure, the security access door can be lock with customer provided padlock.
- **5.1 CONNECTING TO SYSTEM** Glycol feed package should be installed within 5 to 10 feet of system. If system is to close, it is difficult to set low pressure systems. If system is too far, pump outputs will very be depending on pipe size, elbows and other fittings. Residential Glycol Feed Packages should be connected to system using a minimum pipe size of ¼" and an isolation valve should be installed for servicing. **DO NOT INSTALL CHECK VALVES OR PRESSURE REDUCING VALVES BETWEEN GLYCOL FEED PACKAGE AND SYSTEM.** The installation of check valve or pressure reducing valves will cause problems with reading system pressure accurately. Material of pipe should be consistent to material of system or from materials limitations chart as stated in section 6.0.
- **5.2 SETTING THE STANDARD PRESSURE SWITCH:** GTP "GRE" Glycol Feed Packages, when specified, can be factory pre-set to your system requirements. To change the setting of the pressure switch: turn adjustment dial on pressure switch clockwise to increase pressure setting and counterclockwise to reduce pressure setting.

^{*}PSID not adjustable ** Digital pressure switch

5.3 SETTING THE DIGITAL PRESSURE SWITCH: GTP "DGRE" Glycol Feed Packages can be ordered with a digital pressure switch. The digital pressure switch is factory calibrated. Pressing the SET button once will give you either the "Lo-P" or "Hi-P" display. It will automatically then show you the setting which can be changed by the up and down arrows. Press the SET button again to get the second setting. Once they are set, just press the ON/OFF button and the pressure switch will start working. See full instruction manual for details.

Keys from left to right:

SET = To view and change pressure settings

UP = Increase setting DOWN = Decrease setting

ON/OFF = To turn system to automatic position.

Display:

LARGE 00.0 = Current pressure reading SMALL 1.6 = Low pressure setting

RED LED = Pump on



6.0 PRESSURE AND TEMPERATURE LIMITATIONS: Residential Glycol Feeders maximum operating perimeters are 20PSI @ 85F. Some optional fittings, as noted in descriptions, may change limitations, contact factory for assistance.

MATERIAL	MAXIMUM SHORT TERM TEMPERATURE	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OPERATING PRESSURE
Polyethylene (PE)	160°F/69°C	85°F/36°C	N/A
Polyvinylchloride (PVC)	140°F/60°C	85°F/36°C	100PSI/6.9BAR
Chlorinated Polyvinylchloride (CPVC)	180°F/77°C	120°F/49°C	100PSI/6.9BAR
Polypropylene (PP)	180°F/77°C	120°F/49°C	100PSI/6.9BAR
Teflon (PTFE)	200°F/93°C	200°F/93°C	N/A
Carbon Steel (CS)	200°F/93°C	200°F/93°C	150PSI/10.3BAR
Cast Iron (CI)	200°F/93°C	200°F/93°C	150PSI/10.3BAR
Brass (BR)	200°F/93°C	200°F/93°C	150PSI/10.3BAR
Stainless Steel (SS)	200°F/93°C	200°F/93°C	150PSI/10.3BAR

Note: Minimum Fluid Temperature is 50°F/10°C.

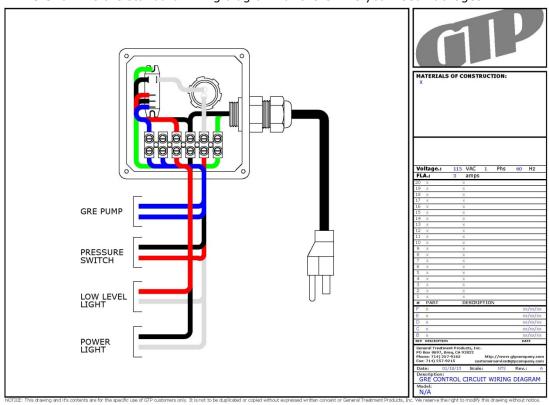
- **7.0 ROUNTINE MAINTENANCE** Routine maintenance in this section is referred to as checking a system once a month until a maintenance schedule can be determined. **All fasteners should be check for proper operations.** Maintenance and care will depend upon the usage and environment in which the glycol feed package is subject to. The following is the suggested regular maintenance checks required to keep the glycol feed system operating properly.
- **7.1 TANK AND PLUMBING** Periodically check piping, hoses and tank fittings for leaks. Y-strainers and check valves need to be free from debris. Tank should be checked for signs of bulging and cracking.
- **7.2 GLYCOL PUMP** The pump should be inspected for proper operation and output. Unusual noises and leaks need to be corrected immediately. Pump assembly and disassembly should only be done by qualified personnel. Wear items, like seal, carbon bearings, diaphragms and gears need to be inspected and replaced when needed. Contact us for assembly and disassembly.
- **7.3 PRESSURE SWITCH** The only wear item is the contacts. Make sure there are no shorts or wire connections problems.
- **7.4 GLYCOL MIXING** Glycol feed package come supplied with mixing valve near hinge side of cover. Close isolation valve (customer supplied) and open mix valve. Allow contents to stir for 10 to 20 minutes, and then close mix valve. Open isolation valve.

8.0 PARTS LISTING In the following diagrams, the systems are shown with tables itemizing parts that may be replaced in the field. If further breakdown is needed, consult manufacturer's operations manual or call us for assistance.

PART	GRE	07	15
TANK	RE07	X	
TAINK	RE15		X X X X X X X X X X X X X X X X X X
STAND	MBPE	X	X
DISC. MANIFOLD	0122018A/HM	X	Χ
CUCT MANIFOLD	0122027E	X	
SUCT. MANIFOLD	0122028E		X X
PUMP, 1.0GPM (E7)	GP1.0R	X	X
PRESSURE SWITCH	PS-4	X	X
	PS-5	X	X X X X X X X X
CONTROL MODULE	CPE	X	X
PRESSURE GAUGE	PG30	X	X
	PG100	X	X
MIXING BALL VALVE	BV02B	X	X

• Note: Pressure gauge scale depends on pressure switch selected.

9.0 WIRING Shown is the standard wiring diagram for the GRE Glycol Feed Packages.



See website for detailed image.

10.0 TROUBLE SHOOTING

11.0 NOTES:

PROBLEM	POSSIBLE CAUSE / ACTION
	Piping / equipment is dirty or fouled
Low flow rate	Discharge is restricted or undersized
ump runs, but no fluid ressure is low ump starts and stops pumping xcessive noise while pump is in peration	Gears are worn
	Suction piping is restricted or plugged
Pump runs, but no fluid	Pump suction valve is closed
	Pump is rotating in the wrong direction
Prossura is law	Piping / equipment is dirty or fouled Discharge is restricted or undersized Gears are worn Suction piping is restricted or plugged Pump suction valve is closed Pump is rotating in the wrong direction Line is restricted Gears are worn Gears are worn or fouled The suction line may be leaking Suction piping is restricted or plugged Pump head an gear may be misaligned Pump mounting hardware is loose System pressure is excessive Float switch is faulty, defective or damaged Wiring is incorrect or shorted Pressure relief valve is clogged Pressure relief valve is set improperly Piping leak on discharge side
riessure is low	Gears are worn
Pump starts and stops pumping	Gears are worn or fouled
	The suction line may be leaking
Evenseivo noise while numn is in	Pump head an gear may be misaligned
	Pump mounting hardware is loose
operation	
	Float switch is faulty, defective or damaged
Pump does not shut off at low level	Low level relay is faulty, defective or damaged
	•
System does not relieve pressure	
properly	
Pump cycles on and off repetitively	
rump cycles on and on repetitively	Pressure settings are not adequate for system size pressure

12.0 PRODUCT LABEL:		
Model:		
Serial Number:		